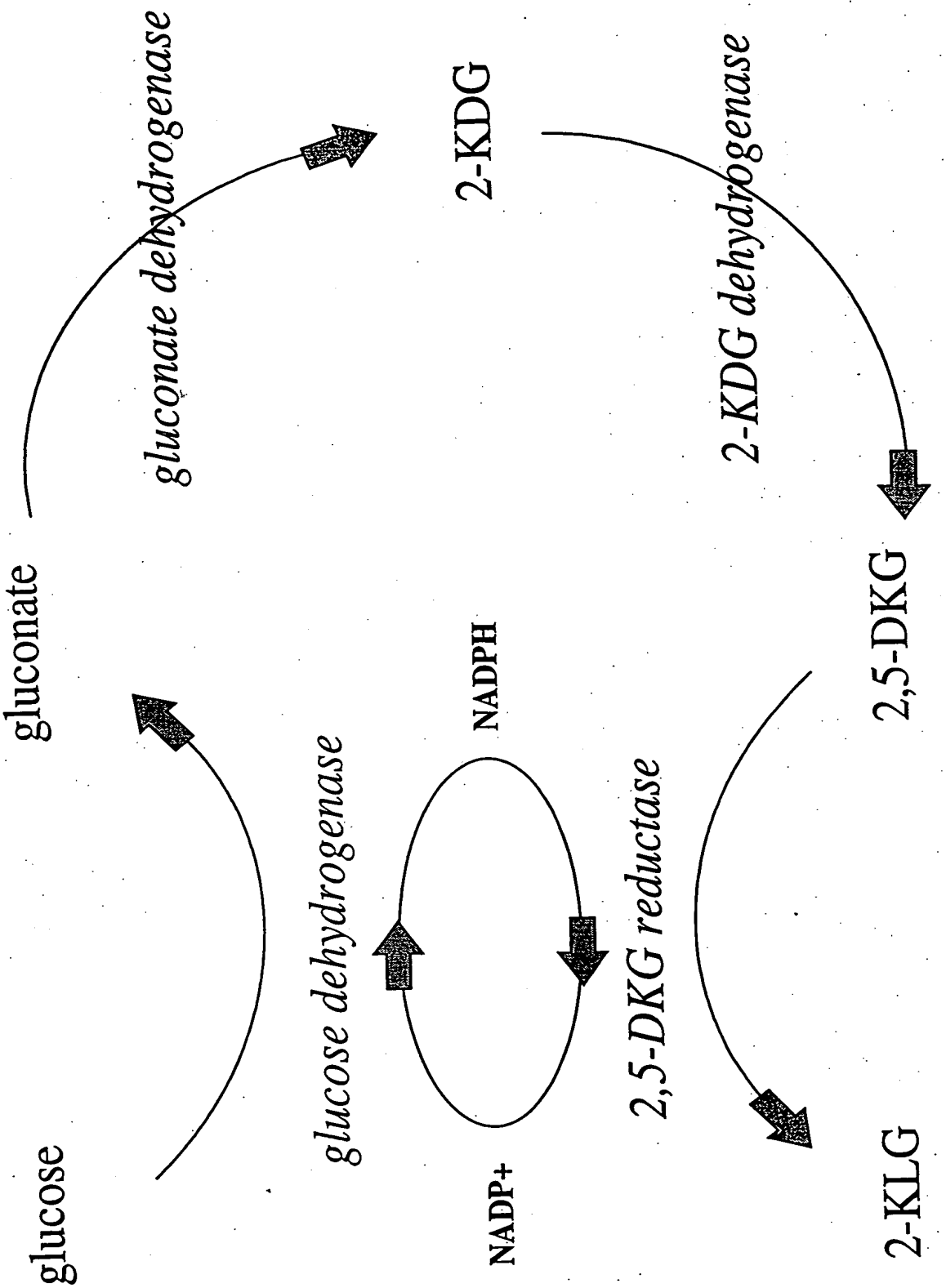
gluconate dehydrogenase
2-KDG
2-KDG dehydrogenase
gluconate
2,5-DKG
glucose dehydrogenase
NADPH
2,5-DKG reductase
glucose
NADP+
2-KLG

FIGURE 1

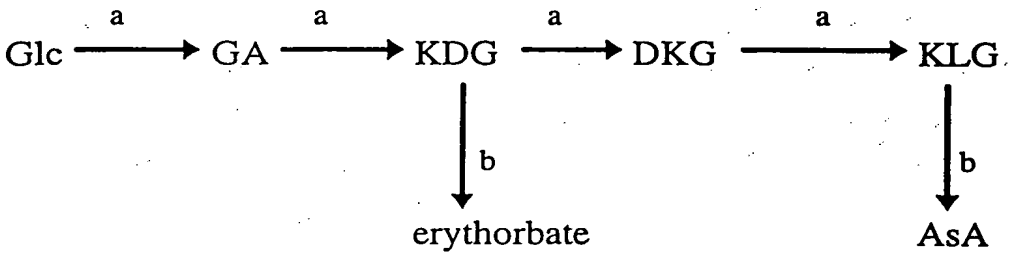

FIGURE 2

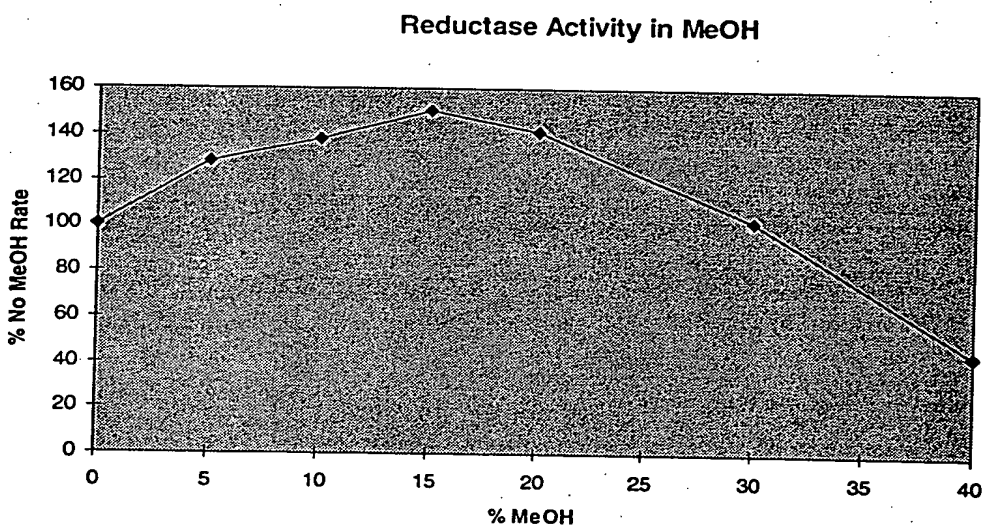
Reductase Activity in MeOH
% No MeOH Rate
160
140
120
100
80
60
40
20
0
0
5
10
15
20
25
30
35
40
% MeOH

FIGURE 3

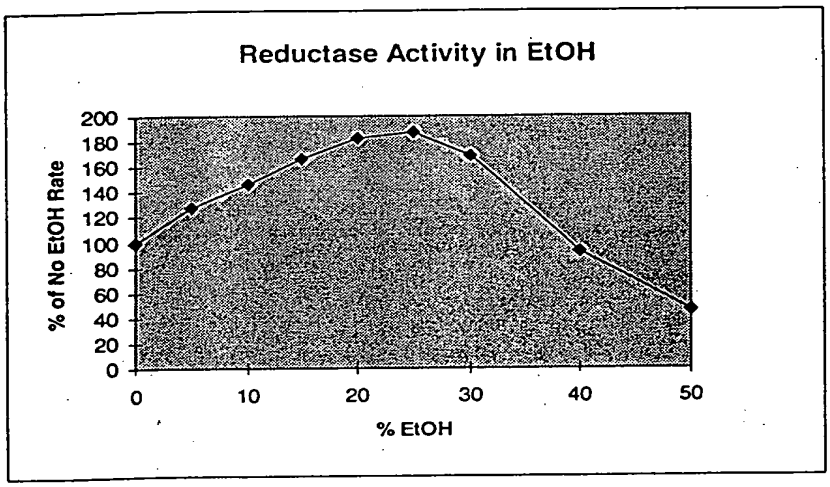
Reductase Activity in EtOH
% of No EtOH Rate
200
180
160
140
120
100
80
60
40
20
0
0
10
20
30
40
50
% EtOH

FIGURE 4

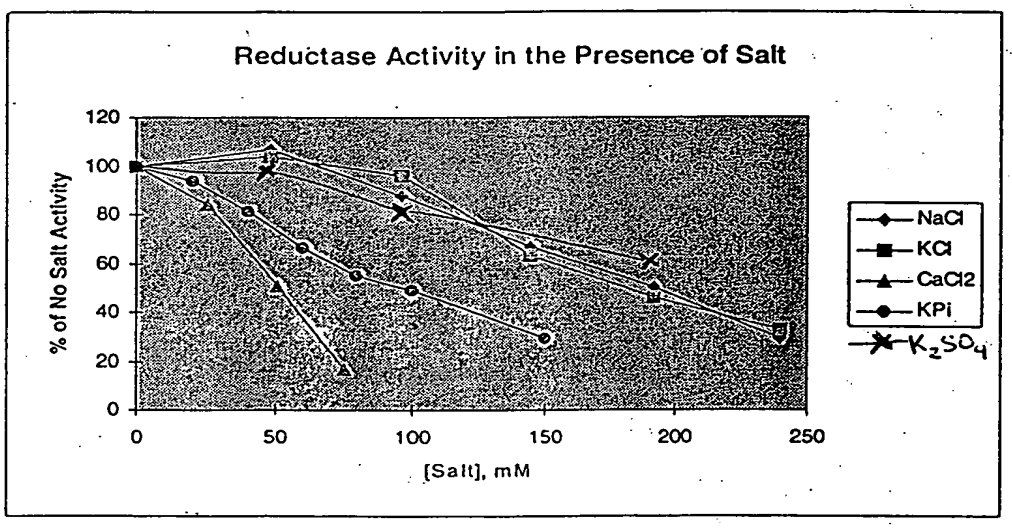
Reductase Activity in the Presence of Salt
% of No Salt Activity
120
100
80
60
40
20
0
0
50
100
150
200
250
[Salt], mM
NaCl
KCl
CaCl2
KPi
K2SO4

FIGURE 5

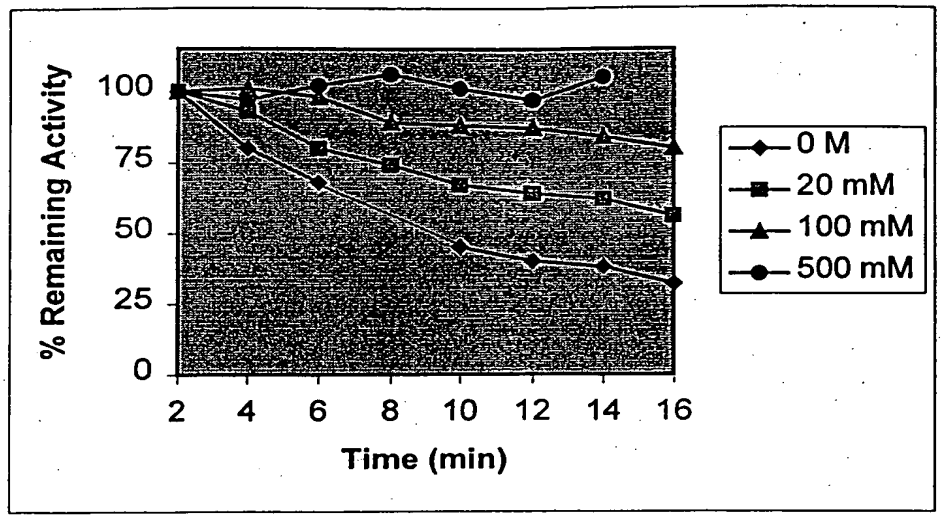
% Remaining Activity
100
75
50
25
0
2
4
6
8
10
12
14
16
Time (min)
0 M
20 mM
100 mM
500 mM

FIGURE 6

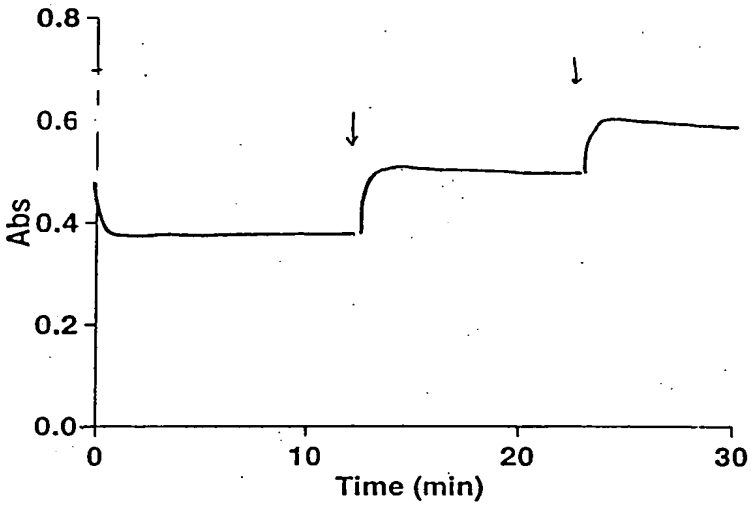

FIGURE 7

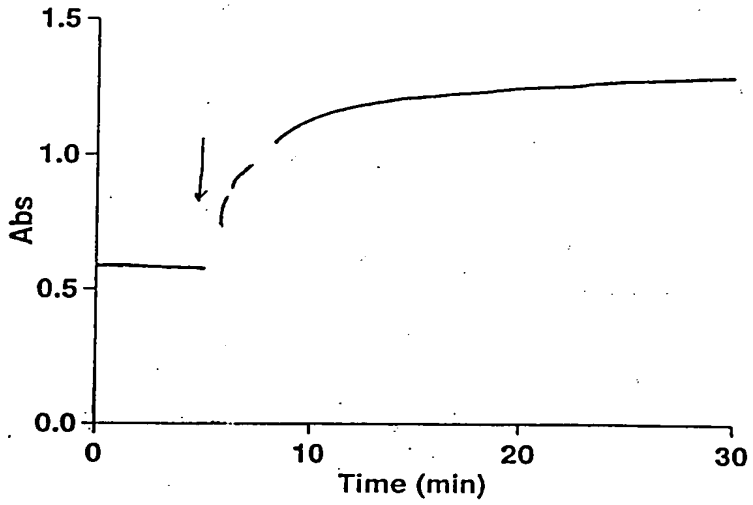

FIGURE 8

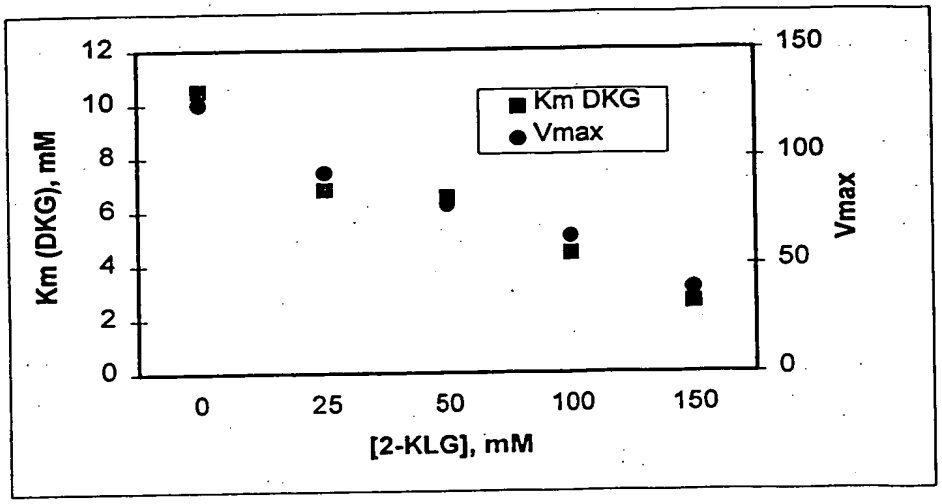
12
10
8
6
4
2
0
Km (DKG), mM
150
100
50
0
Vmax
Km DKG
Vmax
0
25
50
100
150
[2-KLG], mM

FIGURE 9